

Portable Data Empowers Leaders



A training program for administrators encourages a leadership infrastructure for school improvement through handheld technology.

Today, school administrators face many challenges. These include pressures to increase all students' achievement in core content areas and to prepare students to be technology literate. Administrators are held to new accountability mandates for tracking the effectiveness of teachers' research-based practices and opportunities to learn in classrooms. In addition to these academic needs, principals are concerned for the security and safety of their students and ultimately seek to provide a positive school climate conducive to learning. Administrators in Michigan have pulled together in a statewide effort to meet these challenges with the help of technology. Their connecting point is a collaborative leadership development program called LEADing the Future (LTF), funded by the Bill & Melinda Gates Foundation. In 2002, the LTF grant team set out to train at least 80% of the administrators in the state (approximately 4,000) to use a variety of technologies with specific emphasis on four goals aligned with ISTE's National Educational Technology Standards for Administrators (NETS•A):

By Mary L. McNabb

- Building intellectual and technical infrastructures for leadership.
- Accessing current and relevant data and information resources.
- Using data and information resources to make and present informed strategic, instructional, organizational, and public leadership decisions.
- Sustaining the infrastructures.

As of winter 2005, the LTF team had conducted 133 one-day training sessions with 3,390 administrators and provided 759 administrators with follow-up sessions focused on uses of portable data applications for school improvement and accountability.

Shifting Technology Leadership

The LTF program is a statewide effort shaped by the five administrator associations in Michigan from its inception: Michigan Association of Secondary School Principals, Michigan Association of School Administrators, Michigan Elementary and Middle School Principals Association, Michigan Association of Public School Academies, and the Michigan Association of Non Public Schools. It is based on goals from the NETS•A and Council of Chief State School Officers Standards for School Leaders.

During interviews, association representatives describe the LTF program as high-quality technology-focused professional development for their members, with the end goal of improving K–12 student achievement. Participating administrators earn CEUs through the Michigan Department of Education. According to association representatives, the LTF training has provided administrators with a shared vision for technology and leadership in the state. Associations also have noticed an increase in

visits to their Web sites since the LTF grant began training their members, according to the LTF summative report, which I co-wrote with Douglas Daniell, Talbot Bielefeldt, and Joan Schneidmiller. As a result, associations now conduct more online business with their membership. These are just a few of its benefits. (*Editor's note:* See Resources on p. 27 for information about this and other reports.)

The LTF team models sophisticated integration of technologies during its face-to-face trainings. Administrators are exposed to a wireless technology infrastructure, handheld computers syncing to laptops, external keyboards, flash drives, secure digital cards, digital cameras, projectors, an audience response system, real-time online surveying with immediate feedback, and specific administrative applications such as the GoLead research channel online, GoLead Newsstand, and an Internet-based administrator learning community. The LTF team also models data collection and analysis processes. For example, as part of the initial training, project facilitators use an online survey service and an audience response system integrated within PowerPoint to demonstrate how to gather real-time data from participants at a meeting and how to access graphed results instantly for data-driven decision-making purposes.

The initial LTF Foundation training is a hands-on professional learning opportunity that focuses on using handheld technology and applications to access and use data to make informed leadership decisions. During the one-day workshop, each administrator is given a handheld computer and portable keyboard and trained in multiple uses of portable technologies that include accessing research and

information on the Web, connecting with educational data for their school, and taking important documents wherever they go. They work together in teams, which helps create a learning community and infrastructure for leadership development, to discuss case scenarios about the No Child Left Behind (NCLB) legislation, the state's accreditation program Education YES!, and other school improvement initiatives. They acquire technology know-how while developing strategies to improve student achievement and school performance.

During the more in-depth follow-up training sessions, administrators use data and technology tools to develop specific goals to improve school and classroom effectiveness and to weave together a model of continuous improvement. The sessions are focused specifically on accessing and using data to make effective leadership decisions to refocus evaluation and accountability on student learning. These extension trainings provide administrators with guided practice using technology to access Michigan Educational Assessment Program (MEAP) data online, create concept-mapping and data-analysis skills, use online data warehouses such as Standards and Poor's, and employ data-analysis strategies. Participants brainstorm actionable ways to streamline data gathering, analysis, and use to meet the challenging mandates of NCLB and the state's accreditation program Education YES!

As a result of their hands-on technology skills training through LTF, Michigan's administrators are becoming leaders in technology within their school communities. This represents a shift in power over technology decisions that typically had been made by more technology-savvy tech coordina-

tors. Typically, administrators are “the last ones to get it” regarding technology in their schools. But this is no longer the case for many districts in Michigan. The technology-based practices emerging among those trained by LTF are promising to systemically change schools for the better, as I reported with Bielefeldt and Schneidmiller in a case study report on Traverse City Area Public Schools (TCAPS).

Effects of Handheld-Based Leadership Practices

The LTF evaluation combined pre- and posttraining surveys with post-training interviews and site visits to compile data about the effects the training is having on administrators’ personal leadership practices as well as systemic school improvements. A pretraining survey was administered online to 919 trainees during their initial one-day session. The posttraining survey was administered online to 319 trainees during their follow-up sessions. Seventy administrators were interviewed by telephone or during site visits to districts exhibiting promising practices related to LTF training. The following evaluation data, pulled from the summative report and the TCAPS case study, suggest LTF is causing a prevalent adoption of innovative handheld-based leadership strategies.

More than 85% of the administrators surveyed report using their handheld Date Books (calendars) and Contacts (addresses) on a routine basis. The handheld has replaced paper-based calendars and address books, resulting in what participants describe as significant gains in efficiency and effectiveness with regard to administrative scheduling. Perhaps one of the most dramatic results was found among administrators who described themselves as having made little or limited use of technology before participating in LTF. They explained how

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using their handhelds for scheduling and managing contacts “demystified technology” or “opened their eyes to what technology could do,” resulting in increases in their use of technology for other leadership duties. The majority of LTF-trained administrators reported engaging in a variety of handheld-based practices, including:

- Accessing the profiles of students they meet in the hall, which allow principals to see immediately if these students are adhering to their class schedules and how well they are progressing academically.
- Accessing budgetary and student achievement data during planning meetings and discussions with teachers, parents, and other administrators, resulting in better informed, data-based decision making.
- Accessing student, parent, and teacher contact information on the fly, which results in immediate dialogue with stakeholders. As one principal put it: “If I need to talk with a parent I can do so right away in front of the student. I resolve issues more quickly this way.”
- Keeping a running record of classroom observations for each teacher in a building, resulting in teacher critiques and evaluations based on comprehensive observation data aggregated over time.
- Using the handheld’s camera to document evidence of incidents needing disciplinary action and using the visual documentation for decision making with parents.

In addition, administrators involved in the LTF grant program are improving their ability to use other types of technology. One principal of a suburban high school explained in an interview that his entire district has a

strong technology initiative spurred on by leadership from the superintendent, who also participated in LTF. Each classroom in his building now has an interactive whiteboard and ceiling-mounted projector connected to a computer workstation, which enable teachers to use a classroom performance system (CPS) for real-time assessment. The district purchased the CPS after seeing it demonstrated during LTF trainings. This principal can access student performance data on his desktop or sync it to his handheld for portability. He pulls student grades every three weeks and routinely uses the data during planning meetings with staff to identify and address the needs of students who are falling behind. The three-week student performance analysis cycle is based on a research-based learning community model and includes an online educational development plan for all students.

In another district where all of the administrators participated in the one-day and follow-up extension training, principals associate their handheld-based strategies with helping them reach their school improvement goal to “match every student with an adult” for purposes of fostering a nurturing school climate. The district employs grade level or wing principals as well as an overall building principal in its junior high schools and senior high schools. Principals who are responsible for a wing or grade level typically are assigned a cohort of students. For one principal, this means keeping tabs on 540 students for their sophomore and junior years as well as overseeing IEPs for 185 students with special needs. For this principal, using the handheld to keep historical records of staffing meetings, teacher and parental com-

munications, and student profiles means increased memory capacity and follow-through credibility.

Handheld calendars are synced among the administrative teams at the building level using Outlook. Secretaries and principals share the responsibility of keeping the calendar up-to-date. In addition to calendar records, the LTF trainings demonstrated strategies such as using Memo files and file organizational strategies to keep a running record of what happens during the day. This principal adopted this habit of record keeping and illustrated how he can use the Find function on his handheld to retrieve all records about a particular student, including photo identification and contact information, student learning and course scheduling records, notes from goal-setting meetings for the student, datebook records and to-do lists, and outcomes. So now when he is confronted with a situation involving decisions about individual students, he can easily retrieve a student profile on his handheld and review it before acting. This principal, like others within the district, owned a handheld previous to the LTF training, but the training taught him how to better organize the handheld functions and data file structure in ways that accommodate his particular job routines and data needs.

During interviews administrators highlight additional handheld-based practices that improve their school governance with regard to crisis planning. Because student profiles are portable and accessible to principals anywhere at any time, the administrators are better equipped to handle school crisis situations in which they may need to take roll or contact each student's parent or guardian. They

have designed their downloadable handheld data systems with student contact, photo identification, and medical emergency information to be functional when their network-based system may be inoperable. There are obvious security benefits to having such a portable student data system in situations when timing is everything.

Administrators who use their handheld to import teacher contract information and internal curriculum mapping documents report the benefits of referencing such information during visits to various school buildings or regional meetings. Having searchable data on the handheld allows district administrators to accurately answer questions teachers or principals might have about dates and frequency of upcoming assessments, for example. District administrators also use their handhelds to carry updated documents with results for the MEAP statewide assessments. These documents are searchable by individual school scores, statewide scores, school rankings, district scores, and comparative financial data for districts in the state. These data records provide administrators with efficiency to make more informed decisions during local and regional meetings with other administrators.

Among those trained by LTF, some administrators are compiling historical student profiles that can easily be shared or passed on as students progress from grade to grade or move from one school to the next. It is too early to identify the longitudinal effects of these student profiles, but it is clear that administrators trained by LTF are able to take actions that are informed by timely data. The types of handheld-based practices emerging among LTF trainees are taking the guesswork out

of school governance and accountability, and positively affecting the school climate, making it more conducive to student achievement.

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Resources

- Daniell, D., McNabb, M. L., Bielefeldt, T., & Schneidmiller, J. (2005). *LEADing the Future: Summative evaluation report*. Eugene, OR: ISTE.
- GoLead Newsstand: <http://www.goknow.com/golead/search/>
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Mary McNabb, director of Learning Gauge Inc., has extensive experience in research, evaluation, and professional development for technology initiatives aimed at improving school leadership, teacher quality, and student achievement.



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